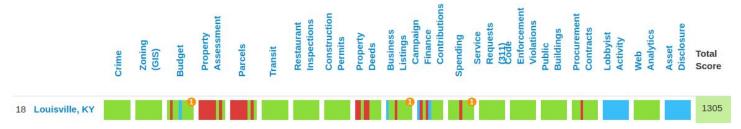
# Annual Open Data Report Louisville Metro Government September 1, 2017



This serves as the fourth OPEN DATA REPORT to the Mayor in accordance with the requirements set forth in Mayor Greg Fischer's Executive Order No. 1, Series 2013, dated October 11, 2013. The purpose is to summarize the current state of data availability from Louisville Metro Government (LMG) to the public and to outline opportunities for continued improvement of access to public information through our Open Data Platform (ODP) at data.louisvilleky.gov.

#### 1. THE STATE OF OPEN DATA

**RANK**. Louisville ranks 18<sup>th</sup> out of 96 active cities on the Open Knowledge Foundation's <u>Open Data City Census</u>, which is respectable, though lower than some previous years.\* Our rank will continue to fall unless more <u>county-wide data is released</u>, for example property value <u>parcel information</u>, <u>property assessment</u>, and <u>property deeds</u> (and <u>sales</u>), all of which comes from agencies outside of LMG.

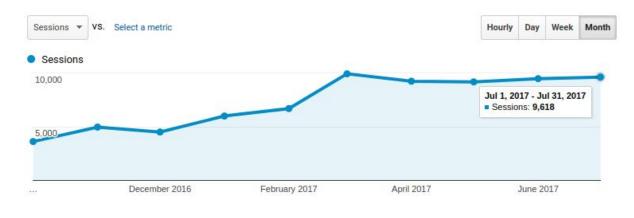


**OKFN US City Census Ranking** 

**QUALITY METRIC.** In February we retired the LouieStat KPI that looked at the number of data sets on the ODP (196), and instead created a new KPI called *Open Data Usage*, which tracks data set downloads. The goal of *Open Data Usage* is to focus on quality and engagement. This new KPI encourages us to release information that our departments and the public will find valuable by showing us whether or not the community is accessing the data. Our most popular data downloads are crime, salary, jail population, and restaurant inspections. When data sets are not being accessed, it encourages us to improve our communication on Open Data and check the accessibility and usefulness of data sets. Since the new ODP launched, the download counts have doubled from around 1,000 to 2,000 a month.

Open Data Usage Information Technology		
KPI Owner: Michael Schnuerle		Process: Data Sharing & Transparency
Baseline, Goal, & Benchmark	Source Summary	Continuous Improvement Summary
Baseline: 1,045 downloads Oct2016 Goal: TBD	Data Source: Google Analytics Goal Source: TBD	Plan-Do-Check-Act Step 2: Validate problem: baseline, benchmark, & goal Measurement Method: Google Analytics, API, direct access to ODP datasets
Benchmark: TBD	Benchmark Source: TBD	Why Measure: Encourage Metro to release valuable and useful data, communicate its existence, make it easily accessible  Next Improvement Step: Track direct and programmatic downloads

**ODP SITE TRAFFIC.** Since the launch of the new ODP in Oct 2016, we've had <u>230,000 page views</u> and 75,000 user sessions. The sessions have seen an increase from around 4,000 to around 10,000 per month.



#### 2. NEW OPEN DATA INITIATIVES SINCE LAST REPORT

**DATA OFFICER.** LMG took the recommendation of <u>What Works Cities</u> and <u>hired the city's first Data Officer</u> in October 2016. His focus includes open data, getting city data into the hands of employees, analysts, leadership, and the public, managing our Data Governance group, doing innovation project data work, and encouraging data partnerships with universities, non-profits, companies, other cities, and state and federal government.

**CDO NETWORK**. The Harvard Ash Center's <u>Civic Analytics Network</u> (CAN) provides a new opportunity for Louisville to partner with other Chief Data Officers (CDOs) from across the United States to learn best practices, collaborate on projects, share knowledge, and pool resources to drive vendor direction and solve some of our biggest problems around data.



**Harvard CAN Network Members** 

**PARTNERSHIPS**. We have continued our <u>open data sharing agreements</u> with Waze, Yelp, <u>Develop Louisville</u>, <u>Lien Holder Notifications</u>, and the <u>Louisville Downtown Partnership</u>, created new partnerships with UofL Speed School and Bellarmine's Data Analytics program for capstone projects, and are working on new partnerships with local non-profits, corporations, and federal agencies.

**PUBLIC FACILITIES.** In the past year we have brought two new facilities to the public: the <u>LouieLab</u>, a co-working space connected to our offices and managed by us and the <u>Gigabit Experience Center</u>, in west Louisville managed by <u>LCCC</u>. Both have been used for open data related events like city sponsored hackathons, data governance meetings, public meetups, and collaborations with local and national organizations.



Gigabit Experience Center Smart Home Hackathon

#### 3. STRENGTHENING OUR OPEN DATA COMMUNITY

HACKATHONS. We have organized and participated in 12 <u>hackathons</u> and hack nights with our partners like the <u>Civic Data Alliance</u> and UofL, to drive open data usage, grow our civic tech community, and create innovative solutions for our citizens. These include <u>Public Safety</u> on Open Data Day, <u>Refugees at UofL</u>, <u>Derby Hacks</u> at <u>FirstBuild</u>, <u>Smart Home</u> at GEC, <u>Data 4</u> <u>Democracy</u>, <u>Brown Forman</u>, <u>analog hackathons</u> with Data Governance and OPI Fellows, and <u>Waze</u> internally.



LouieLab Open Data Day Public Safety Hackathon

**OPEN DATA SERVICES.** We think of services that provide data to the public as open data. This year we integrated many of our <u>live data APIs</u> into a city-run platform called <u>IFTTT</u>, where citizens can easily integrate <u>air quality</u> and emergency notification data into their daily lives. We also worked with the civic tech community to develop services based on our APIs for smart home devices like <u>Alexa</u>, including air quality, junk pickup, news, and crime reports. See our city's <u>Github repos</u> for more details.

**ODP FEATURES.** Added to the newly upgraded open source <u>DKAN</u> ODP is a direct contact email, new top navigation, a <u>gallery</u> showcasing the public uses of our data, a form to <u>submit new projects</u>, and a well-documented <u>API</u> for programmatic access.















stop, and other data to citizens. See

Louisville's Data



**Open Data Gallery Projects** 

## 4. INTERNAL DATA PROJECTS

**DATA STANDARDS**. Louisville continues to align our data to useful <u>data standards</u> like GTFS, LIVES, Waze CCP, and Open311, and is working alongside cities and communities to expand existing standards and define new ones where needed.

**DATA GOVERNANCE.** Our 60 person cross-departmental Data Governance group added metadata to the ODP, including descriptions, data dictionaries, cross linking, and contact info to aid in helping the public understand our data. We are also working on data collection policies to ensure our data is consistent and accurate.



**Data Quality Workshop Materials** 

**ADDITIONAL RECOGNITION.** All of the above successes required the collaboration and hard work of many city employees, beyond the efforts of the newly hired data officer. I would like to commend and thank Mary Hampton, Matt Gotth-Olsen, Ed Blayney, and Grace Simrall from OPI<sup>2</sup>, Matt Gantner and Mike Reynolds from DoIT, the department chiefs and directors, Mayor Fischer and his staff, and the members of our Data Governance Team for all of their focus and dedication to open data. I would also like to thank our community organizations including the <u>Civic Data Alliance</u>, <u>Greater Louisville Project</u>, and the local press for encouraging Metro to release new and useful data and putting our data to good use for our citizens.

### 5. FUTURE IMPROVEMENT AREAS

**VENDOR COLLABORATION.** In the coming year we plan many improvements to the ODP. Ownership of the software has moved from Granicus to <u>CivicActions</u>, and they are dedicated to adding features, like improved mapping, better built-in charts, and integrated data visualization tools. We also want to add a discussion forum, public discussions on each data set, and visible counts of downloads.

**DATA WAREHOUSING.** Our office is working on a city-wide hybrid cloud data warehouse solution for automating the extraction and loading of data to the ODP, which will allow more timely, quality data to be published. Our first step is to warehouse, analyze, and our transit and mobility data using Amazon's <u>City on a Cloud award</u>.

**API IMPROVEMENTS.** We are working with the DKAN community and CivicActions vendor to add features to the ODP's API (<u>CSV format</u>, a <u>sql</u> option, <u>bug fixes</u>), allow tracking of API usage, and track direct data set downloads.

**DATA VISUALIZATIONS**. The city publishes our <u>enterprise level KPI data</u> on the ODP right now which we use for our LouieStat program. This year we are striving to start publishing department level KPI data and visualize it using a new Open Performance system using open source software that will also improve the ODP.

**CIVIC TECH.** We will continue working with our civic tech community to encourage the use of our data and web services, for platforms like Alexa, Google Home, IFTTT, and custom projects to meet the needs of all our citizens.

#### 6. CONCLUSION

Open data, public transparency, and data-driven efforts in Louisville remain a strong and continuing priority for Mayor Greg Fischer and the Office of Civic Innovation. LMG will continue to release new data the public values, improve existing data sets, and increase the frequency of data updates. We will drive usage and adoption by hosting public events, driving usage internally, communicating via press and social media, partnering with the civic tech community, and improving our data services. The goal is a transparent government, improved services for citizens, reduced costs, an informed and educated populous, and to empower data-driven decision making.

Respectfully submitted on September 1, 2017

Michael Schnuerle

<u>Data Officer</u>, Office of Civic Innovation, <u>OPI<sup>2</sup></u>

<sup>\*</sup> Correction to 2016 Open Data Report. It stated "Louisville is now ranked 9<sup>th</sup> out of 84 U.S. cities, according to the '2016 U.S. City Open Data Census'" when it should have stated "Louisville is now ranked 19<sup>th</sup> out of 84 active U.S. cities, according to the most recent 'U.S. City Open Data Census'".